



Greenforest Incorporated



Consulting Arborist

TO: Chas Peterson, Acquisitions & Entitlement
Blue Fern
18300 Redmond Way Suite 120
Redmond, WA 98052

REFERENCE: Arborist Report, Towns on 7th, Issaquah

DATE: August 10, 2022

PREPARED BY: Favero Greenforest, ISA Certified Arborist # PN -0143A
ISA Tree Risk Assessment Qualified
ASCA Registered Consulting Arborist® #379

You contacted me and contracted my services as a consulting arborist. My assignment is to identify, inventory and assess the regulated trees at the above referenced site, in preparation for redevelopment, and to recommend placement of protection fencing for retained trees, based on proposed site improvements.

The purpose of this report is to establish the quantity and condition of the regulated onsite trees to satisfy City of Issaquah permit submittal requirements.

I visited the site 11/17/2021 and visually inspected 12 trees, which are the subject of this report and represent all regulated trees associated with the parcels.

Summary:

<i>Significant</i>	<i>5</i>
<i>Landmark</i>	<i>3</i>
<i>Hazardous</i>	<i>0</i>
<i>Offsite</i>	<i>4</i>

Attributes for the subject trees are summarized in attachment 3.

LIMITATIONS AND USE OF THIS REPORT

This tree report establishes, via the most practical means available, the existing conditions of the tree on the subject property. This report is based solely on what is readily visible and observable, without any invasive means.

There are several conditions that can affect a tree's condition that may be pre-existing and unable to be ascertained with a visual-only analysis. No attempt was made to determine the presence of hidden or concealed conditions which may contribute to the risk or failure potential of trees on the site. These conditions include root and stem (trunk) rot, internal cracks, structural defects or construction damage to roots, which may be hidden beneath the soil. Additionally, construction and post-construction circumstances can cause a relatively rapid deterioration of a tree's condition.

TREE INSPECTION METHOD – TREE HEALTH, CONDITION AND VIABILITY

I visually inspected this tree from the ground. I performed a Level 1 risk assessment.¹ This is the standard assessment for populations of trees near specified targets, conducted in order to identify obvious defects or specified conditions such as a pre-development inventory. This is a limited visual assessment focuses on identifying trees with imminent and/or probable likelihood of failure, and/or other visible conditions that will affect tree retention.

High-risk trees can appear healthy in that they can have a dense, green canopy. This may occur when there is sufficient sapwood or adventitious roots present to maintain tree health, but inadequate strength for structural support.

Conversely, trees in poor health may or may not be structurally stable. For example, tree decline due to root disease is likely to cause the tree to be structurally unstable, while decline due to drought or insect attack may not.

One way that tree health and structure are linked is that healthy trees are more capable of compensating for structural defects. A healthy tree can develop adaptive growth that adds strength to parts weakened by decay, cracks, and wounds. This report identifies unhealthy trees based on existing health conditions and tree structure, and specifies which trees are most suitable for preservation.²

No invasive procedures were performed on any trees. The results of this inspection are based on what was visible at the time of the inspection.

¹ Companion publication to the *ANSI A300 Part 9: Tree Shrub and Other woody Plant Management – Standard Practices, Tree Risk Assessment*. 2011. ISA.

² Companion publication to the *ANSI A300 Part 5: Tree Shrub and Other woody Plant Maintenance – Standard Practices, Managing Trees During Construction*. 2008. ISA.

The attached inventory summarizes my inspection results and provides the following information for each tree:

Tree category indicates if tree is significant or landmark. **Tree, landmark:** A tree greater than thirty (30) inches DBH **Tree, significant:** A tree at least six (6) inches or greater at DBH or an alder or cottonwood tree eight (8) inches or greater at DBH

Tree number as shown on the attached exhibit.

Diameter/diameter-breast-height (DBH): The diameter of any tree trunk, measured at four and one-half (4.5) feet above average grade. For trees with multiple leaders at four and one-half (4.5) feet height, the DBH shall be the combined cumulative total of branches greater than six (6) inches diameter at four and one-half (4.5) feet above the average grade.

Dripline (R') The circular area around the base of a tree calculated as the distance to the furthest extent to the tree's dripline.

Structure and Health rating '1' indicates good to excellent condition; no visible health-related problems or structural defects, '2' indicates fair condition; minor visible problems or defects that may require attention if the tree is retained, and '3' indicates poor condition; significant visible problems or defects and tree removal is recommended.

Tree Type indicates if tree is deciduous (D), evergreen (E), coniferous (C) or broadleaf (B).

City also provides language in their code for these designations for regulated trees:

Tree, heritage: A tree or group of trees specifically designated by the City because of historical significance, special character or community benefit.

Tree, specimen: A particularly impressive or unusual example of a species due to its size, shade, age, or any other trait that epitomizes the character of the species, including Issaquah's Centennial Tree, "Eddie's White Wonder" Dogwood.

It is my understanding that City designates heritage and specimen trees, and no effort is made in this report to do so.

SUBJECT TREES

The subject trees are all mature and in fair to excellent condition. They include native Douglas-fir, plus Alberta and Blue spruces; also Japanese maples and a Catalpa.

TREE RETENTION & PROTECTION

The table below identifies 2 onsite trees (**bold type**) proposed for retention, and 4 offsite trees, all to be protected. The table below identifies each tree by number, plus pertinent attributes, and the distance I recommend for placement of tree protection fencing (TPF). See attached exhibit for an illustration.

Tree No.	DBH	Species	Dripline (R')	TPF
3	41"	Douglas-fir	27'	At or a greater distance than dripline, wherever possible.
8	18"	Blue spruce	11'	11 feet adjacent to the proposed building, and expanded to the E and W.
9	20"	Douglas-fir	17'	No closer than 11' from center of trunk.
10	28"	Douglas-fir	20'	No closer than 14' from center of trunk.
11	28"	Ponderosa pine	7'	No closer than 14' from center of trunk.
12	12,16"	Mt. Ash	10'	At or greater distance than dripline, wherever possible.

TPF for trees 3 and 12 are at minimum placed at the driplines for each tree, and expanded as possible where proposed site improvements allow.

TPF for trees 8-11 are placed at limits of soil disturbance that I calculated, based on rootplate³, trunk diameter,^{4,5,6} and ISA Best Management Practices.⁷ These apply to only one side of the tree, and assume expanded protection on the other three sides (as in this case, which could be offsite).

I recommend the areas inside the TPF be covered in 6" arborist wood chips during construction to reduce soil water evaporation, and to suppress weed growth.

³ Coder, Kim D. 2005. *Tree Biomechanics Series*. University of Georgia School of Forest Resources.

⁴ Smiley, E. Thomas, Ph. D. *Assessing the Failure Potential of Tree Roots, Shade Tree Technical Report*. Bartlett Tree Research Laboratories.

⁵ Fite, Kelby and E. Thomas Smiley. 2009. *Managing Trees During construction; Part Two*. Arborist News. ISA.

⁶ Andrew R. Benson, Andrew Koeser, Justin Morgenroth. *Responses Of Mature Roadside Trees To Root Severance Treatments*. 2019. Journal of Urban Forestry & Urban Greening.

⁷ Companion publication to the ANSI A300 Series, Part 5: Managing Trees During Construction. 2008. ISA.

ATTACHMENTS:

1. Assumptions and Limiting Conditions
2. Certification of Performance
3. Regulated Tree Inventory
4. Tree Protection Exhibit

Attachment No. 1 - Assumptions & Limiting Conditions

1. A field examination of the site was made 11/17/2021. My observations and conclusions are as of that date.
2. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/arborist can neither guarantee nor be responsible for the accuracy of information provided by others.
3. I am not a qualified land surveyor. Reasonable care was used to match the trees indicated on the sheets with those growing in the field.
4. Construction activities can significantly affect the condition of retained trees. All retained trees should be inspected after construction is completed, and then inspected regularly as part of routine maintenance.
5. Unless stated other wise: 1) information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of inspection; and 2) the inspection is limited to visual examination of the subject trees without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied that problems or deficiencies of the subject tree may not arise in the future.
6. All trees possess the risk of failure. Trees can fail at any time, with or without obvious defects, and with or without applied stress. A complete evaluation of the potential for this (a) tree to fail requires excavation and examination of the base of the subject tree. Permission of the current property owner must be obtained before this work can be undertaken and the hazard evaluation completed.
7. The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made.

Attachment No. 2 - Certification of Performance

I, Favero Greenforest, certify that:

- I have personally inspected the trees and the property referred to in this report and have stated my findings accurately.
- I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.
- The analysis, opinion, and conclusions stated herein are my own and are based on current scientific procedures and facts.
- My analysis, opinion, and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices.
- No one provided significant professional assistance to me, except as indicated within the report.
- My compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client of any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a member in good standing of International Society of Arboriculture (ISA), and the ISA PNW Chapter, I am an ISA Certified Arborist (#PN-0143A) and am Tree Risk Assessment Qualified, and am a Registered Consulting Arborist® (#379) with American Society of Consulting Arborists. I have worked as an independent consulting arborist since 1989.

Signed:


GREENFOREST, Inc.
By Favero Greenforest, M. S.



Date: August 10, 2022

Attachment No. 3 – Regulated Tree Inventory

Dripline radius from center of tree

Condition ratings '1' good to excellent, '2' fair, '3' poor

Tree Type indicates deciduous (D), evergreen (E), coniferous (C) or broadleaf (B)

Category	No.	DBH (Cumul.)	Species	Dripline (R')	Health	Structure	Comments on Condition	Tree Type
Significant	1	23"	Douglas-fir	21'	1	1		CE
Significant	2	27"	Douglas-fir	26'	1	1		CE
Landmark	3	41"	Douglas-fir	27'	1	2	Double leaders	CE
Landmark	4	(5) 8-13" (49.9")	Japanese maple	20'	1	2	Multiple leaders	BD
Landmark	5	(5) 6-10" (38.2")	Japanese maple	16'	1	2	Multiple leaders	BD
Significant	6	18"	Alberta spruce	12'	1	2	Genetic sport reversion	CE
Significant	7	25"	Catalpa	21'	1	2	Topped, multiple leaders	BD
Significant	8	18"	Blue spruce	11'	1	1		CE
OFFSITE TREES								
Significant	9	20"	Douglas-fir	17'	1	1	Tree 6' across fence	CE
Significant	10	28"	Douglas-fir	20'	1	1	Tree 6' across fence	CE
Significant	11	28"	Ponderosa pine	7'	1	1	Tree 15' across fence	CE
Significant	12	12,16" (28")	Mt. Ash	10'	1	2	Old age, large pruning wounds on trunk, tree 6' across fence	BD



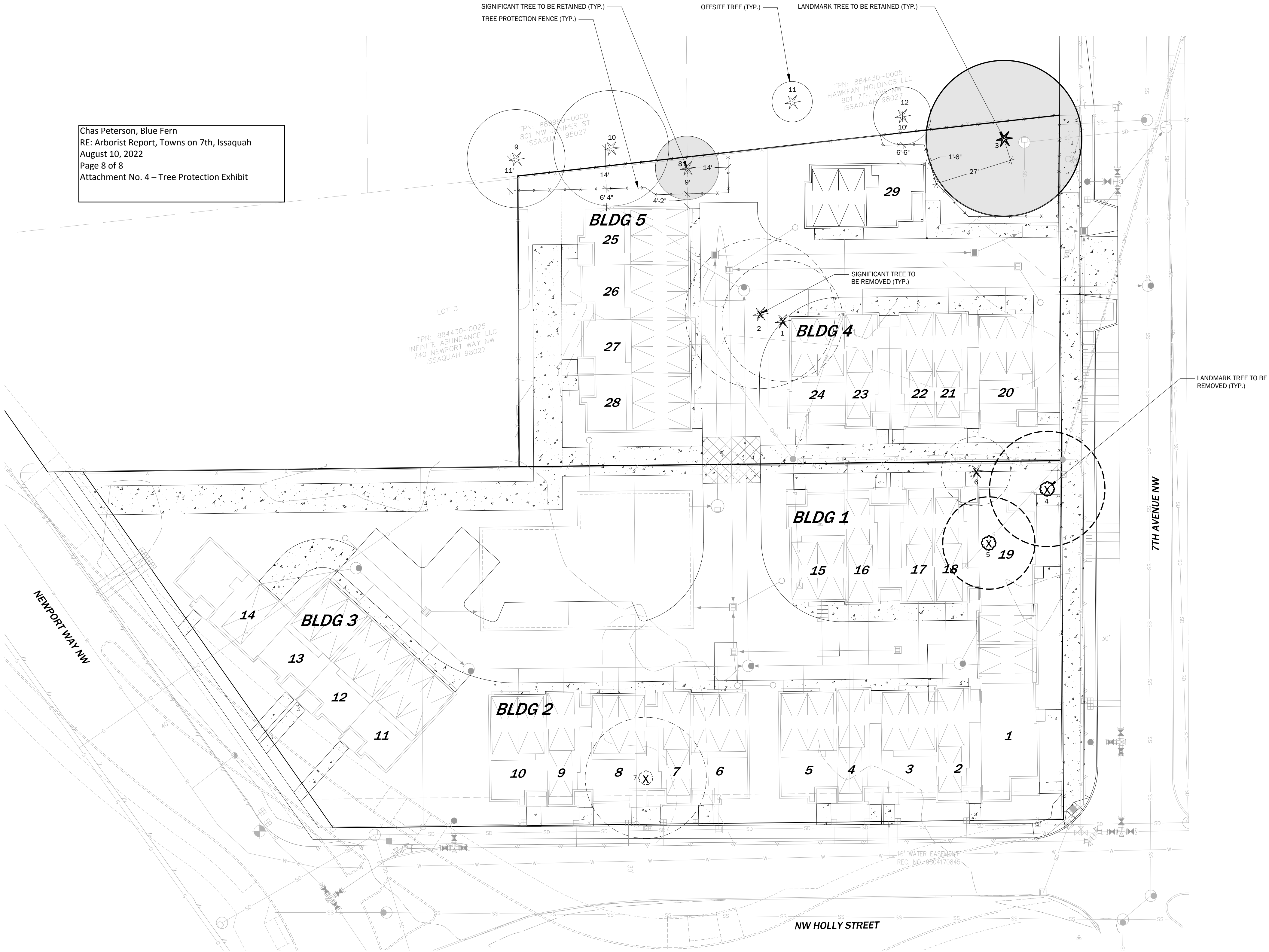
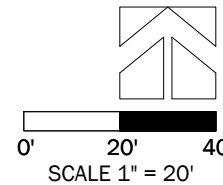


EXHIBIT: TREE RETENTION

TOWNS ON 7TH

NOTE: EXHIBIT IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE. NOT FOR CONSTRUCTION.



AUGUST 16, 2022

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